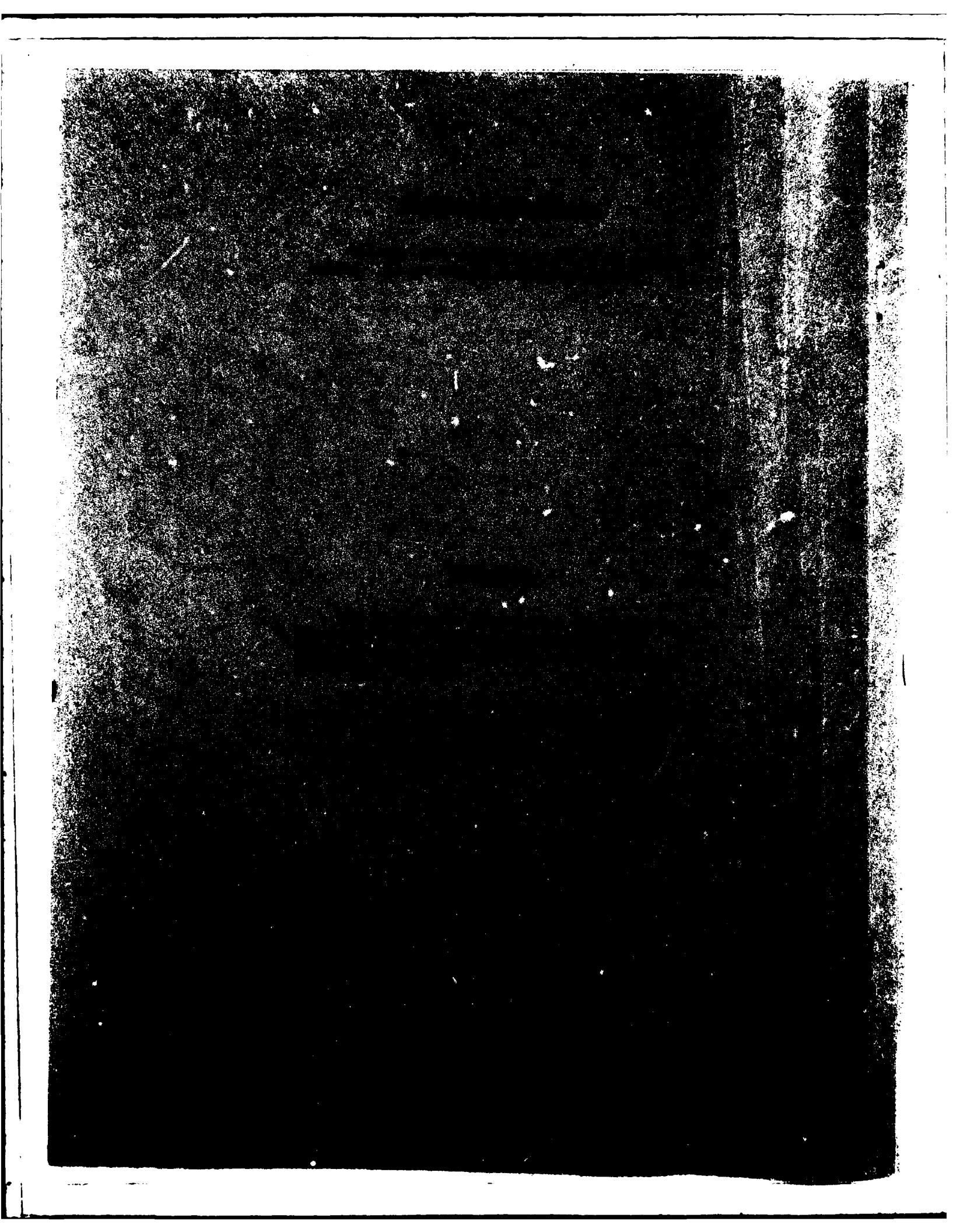


AD-A103 673 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
12821A LANCE, MISSILE NUMBER 4572, ROUND NUMBER 367-MCL, 16 JUL--ETC(U)
JUL 81
UNCLASSIFIED ERAUCOM/ASL-DR-1194

NL

END
DATE
JUL 81
9 - RI
DTIC

AD A103673



12821A LANCE
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 12821A LANCE, Missile Number 4572, Round Number 367-MCL presented in tabular form.		

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Accession For	NTIS CR&I	DTIC Type	User	Justification
By	Distribution/	Availability Codes	Avail and/or Special	
DIST	A			

INTRODUCTION

12821A LANCE, Missile Number 4572, Round Number 367-MCL, was launched from RATCAT, White Sands Missile Range (WSMR), New Mexico, at 1000 MDT on 16 Jul 1981. The scheduled launch time was 1000 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), Wind direction and speed, and cloud cover were made at the **RATSCAT** Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from Double Theodolite Pilot-Balloon observations at:

SITE AND ALTITUDE

RATSCAT

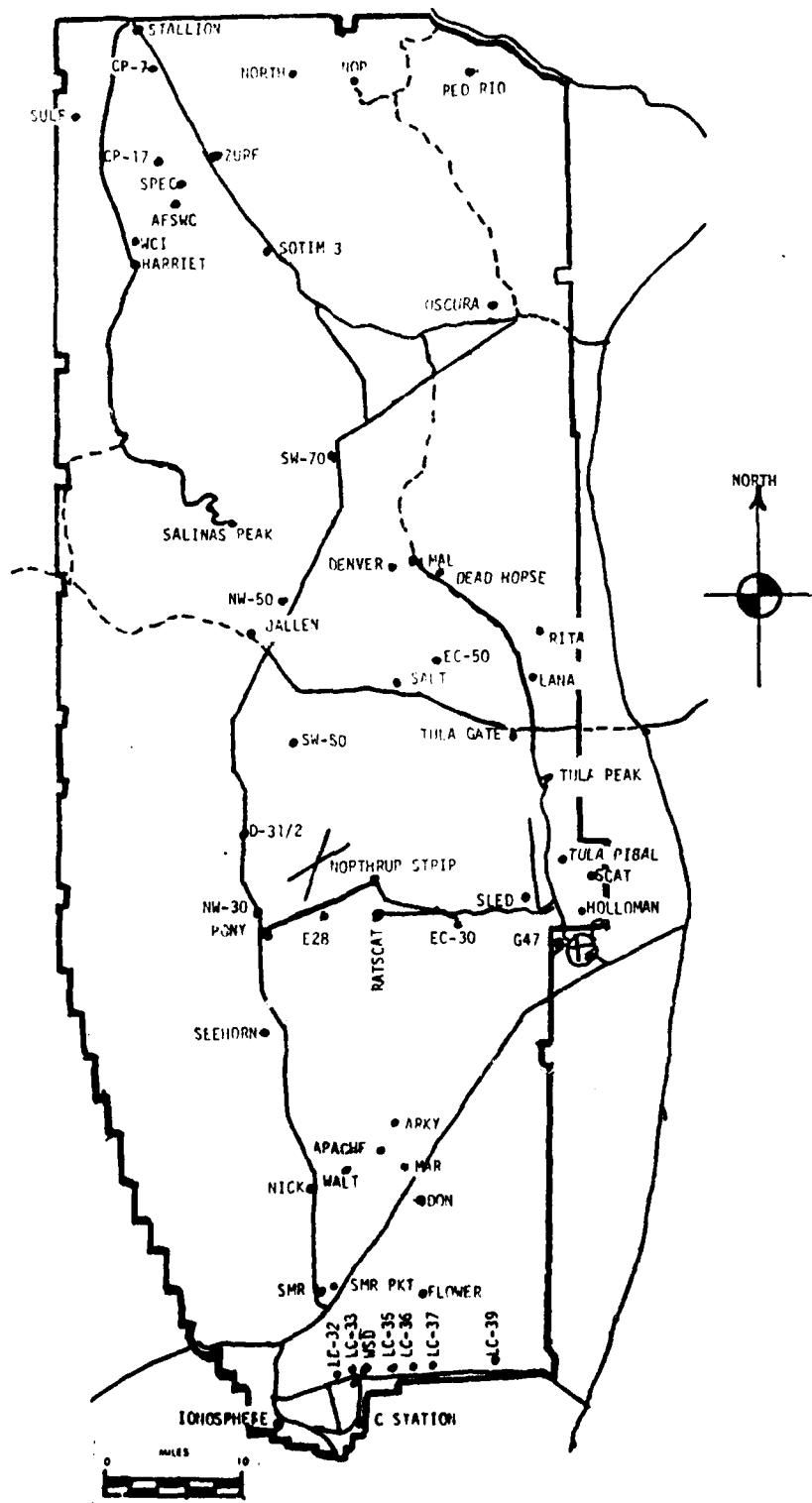
T-10 mins to 1140 Meters
T-0 mins to 2100 meters

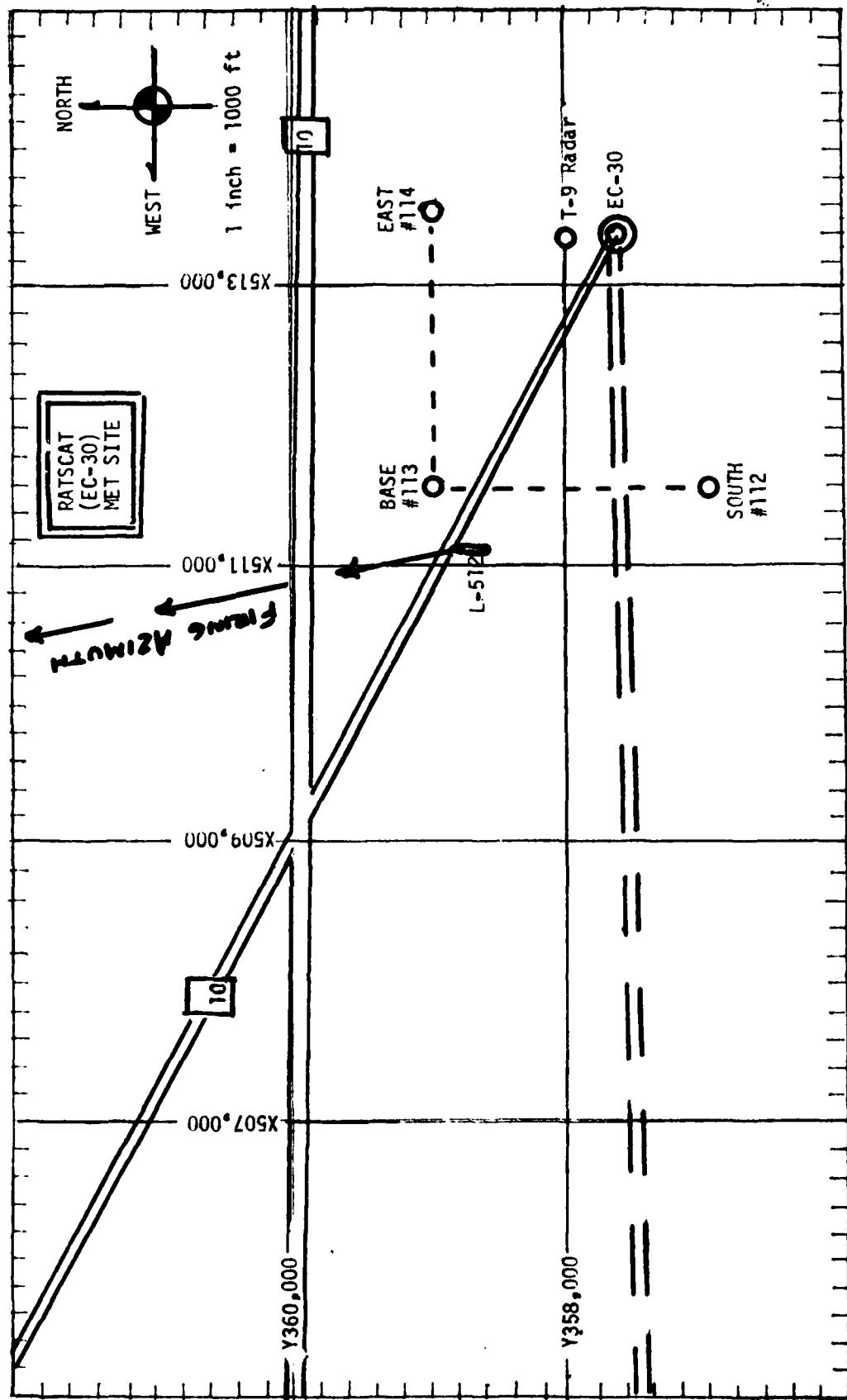
(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to high as possible in 500-feet increments.

SITE AND TIME

JAL 0630 MDT
JAL 0950 MDT
HMS 0950 MDT

WSMR METEOROLOGICAL SITES





PROJECT SURFACE OBSERVATION

TABLE 1

DATE 16 MONTH July YEAR 81

TIME M.D.T	PRESSURE mb	TEMPERATURE °C	DEW POINT °C	RELATIVE HUMIDITY %	DENSITY gm/m ³	WIND DIRECTION deg	WIND SPEED kts	CHARACTER kts	VISIBIL- ITY
1000	880.1	26.8	21.0	71	1.007			CALM	50

OBSTRUCTIONS TO VISIBILITY	CLOUDS			REMARKS		
	1st LAYER AMT	TYPE	HGT	2nd LAYER AMT	TYPE	HGT
1	CU	7000	2	C1	20000	

PSYCHROMETRIC COMPUTATION

TIME:	1000		
DRY BULB TEMP.	26.8		
WET BULB TEMP.	22.5		
WET BULB DEPR.	4.3		
DEW POINT	21.0		
RELATIVE HUMID.	71		

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM RATSCAT

DATE 16 July 1981

TIME 0950 MDT

COORDINATES (WSTM) X= 511,590.12 Y= 358,916.11 H= 3953.19

NOTE: WIND DIRECTIONS ARE REFERENCED TO D/T.

HEIGHTS ARE METERS AGL X OR FEET AGL _____.

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM RATSCAT DATE 16 July 1981 TIME 1000 MDT

COORDINATES (WSTM) X= 511,590.12 Y= 358,917.11 H= 3953.11

NOTE: WIND DIRECTIONS ARE REFERENCED TO D/T.

HEIGHTS ARE METERS AGL X OR FEET AGL _____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC		CALM
60	217	01
120	209	02
180	197	03
240	189	04
300	184	06
360	180	07
420	177	09
480	178	10
540	182	10
600	189	10
660	198	08
720	202	07
780	194	07
840	190	08
900	187	09
960	186	10
1020	180	10
1080	172	11
1140	165	11
1200	163	11
1260	162	11
1320	160	10
1380	161	09
1440	161	09
1500	161	09
1560	160	09
1620	160	08

COMPUTER MET MESSAGES

HMS 0950 MDT	JAL 0950 MDT
METCM1329061	METCM1332065
161590126876	161590124875
00320002 30040876	00000000 30190875
01322088 30030866	01296004 29960865
02297010 29780842	02304003 29700841
03328013 29530804	03267007 29430803
04298008 29199758	04341008 29090758
05306005 28830715	05318009 28730714
06410005 28460674	06573006 28400673
07390012 28090634	07373010 28060633
08385012 27700597	08402012 27670596
09399008 27410561	09411012 27400560
10344003 27050527	10398008 27070526
11343007 26670495	11356012 26700494
12367009 26280449	12359009 27230448
13372008 25740394	13376013 25750393
14274006 25010344	14307009 25020344
15264010 24230300	15301011 24250300
16294010 23450260	16286013 23410260
17338009 22660224	17338008 22630224
18587007 21880193	18605004 21880192
19064009 21110164	19034010 21270164
20172012 20640140	20069005 20650140
21314011 20420118	21243012 20320118
22190011 20540100	22226010 20560100
23191015 20662085	23201010 20560085
24184022 20860072	24193019 20680072
25191020 01310062	25180028 21200061
26182020 21620053	26161018 21540052

STATION NUMBER 45100 FTT 71
16 JULY 1 0600 hrs MOT
ASC. 1500.0

STATION NUMBER 45100 FTT 71
10700, 00711
JULY 1

GLOBAL COORDINATES
33.1671° LAT DEG
106.49511 LONG DEG

TABLE 5
PRESSURE OF ATMOSPHERE
IN MILLIBARS (M. FEEt)
TEMPERATURE
IN DEGREES CENTIGRADE
AIR DEW POINT
IN PERCENT

	PRESSURE OF ATMOSPHERE IN MILLIBARS (M. FEEt)	TEMPERATURE IN DEGREES CENTIGRADE	AIR DEW POINT IN PERCENT	KEL. DEG.
676.1	4051.0	20.2	13.4	65.0
673.0	4132.2	20.4	14.3	68.0
560.0	4580.1	22.6	14.7	61.0
350.0	4914.7	21.8	13.4	59.0
765.2	7394.3	17.6	9.5	57.0
700.0	10573.7	11.8	4.5	51.0
668.4	11640.9	9.4	3.4	66.0
635.4	13015.4	6.0	1.5	73.0
596.6	14702.5	2.1	-5.1	59.0
583.0	15313.9	0.8	-5.8	71.0
565.8	16105.1	-0.2	-1.0	63.0
540.0	17302.9	-1.9	-7.0	68.0
524.2	18107.2	-3.6	-9.4	61.0
512.6	18687.5	-5.6	-7.4	67.0
507.6	18940.7	-5.6	-6.2	62.0
560.0	19350.1	-6.0	-10.6	70.0
483.8	20177.6	-7.2	-9.3	65.0
456.4	21666.7	-10.0	-11.7	57.0
449.2	22069.0	-12.2	-13.1	93.0
441.6	22498.6	-12.4	-13.3	93.0
426.6	23366.7	-13.4	-14.5	91.0
419.4	23793.1	-15.8	-17.7	72.0
407.4	24516.7	-15.8	-19.2	75.0
400.0	24971.1	-16.7	-21.7	65.0
378.8	26310.2	-19.8	-23.1	75.0
369.4	26922.5	-21.3	-25.0	72.0
365.2	27200.2	-21.5	-24.5	48.0
344.6	28604.0	-23.4	-35.2	40.0
331.4	29539.6	-26.2	-35.7	49.0
300.0	31084.6	-31.6	-47.4	19.0
250.0	36040.5	-42.1	-44.8	42.0
200.0	40880.1	-54.7		
180.8	42084.4	-59.6		
171.6	44037.3	-59.5		
150.0	46798.8	-65.3		
131.0	49403.0	-70.6		
113.8	52245.6	-69.4		
109.8	54627.5	-70.5		
100.0	54764.0	-69.4		
91.6	56523.8	-68.6		

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 01 0630 HRS MDT
ASSEMBLATION NO. 71

SIGNIFICANT LEVEL DATA
1970030071

GEODETIC COORDINATES
53.16712 LAT DEG
106.49511 LON DEG

TABLE 5 (con't)

PRESSURE GEOMETRIC
MILLIBARS ALTITUDE
MILLIBARS MSL FEET DEGREES CENTIGRADE

83.0	581103.8	-68.4
77.6	59819.5	-67.2
74.8	60556.7	-64.2
70.0	61093.0	-65.4
67.0	62773.8	-65.1
60.0	65029.2	-58.6
53.0	67598.4	-59.6
50.0	68809.8	-57.0
30.0	79644.4	-51.2
24.0	84448.9	-50.7
20.0	88425.6	-45.6
14.6	95459.9	-39.8

TEMPERATURE
AIR DEWPOINT
DEGREES CENTIGRADE

REL.HUM.
PERCENT

STATION ALTITUDE 4650 FEET MDT
16 JULY 01
ASCENSION 140. 71

UPPER AIR DATA
197003..071
JALLEN

GO OUT COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 6

GEOPHYSIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DESLITY GM/CUBI. METER	SPD OF SOUND KNOTS	DIRECTION DEGREES (TN)	IND DATA SPEED KNOTS	IND DATA OF REFRACT 101.
4050.0	870.1	20.2	13.4	65.0	1033.5	669.5	•0	•0	1.000298
4500.0	862.4	22.2	14.6	62.3	1009.8	672.0	170•2	•8	1.000298
5000.0	847.4	21.7	13.3	58.9	994.5	671.2	176•2	1.7	1.000288
5500.0	832.6	21.0	12.6	58.6	979.7	670.4	170•4	2.7	1.000282
6000.0	818.1	20.3	11.8	58.3	965.0	669.5	170•0	3.2	1.000276
6500.0	805.8	19.6	11.1	57.9	950.6	665.6	150•5	3.2	1.000270
7000.0	789.7	18.9	10.3	57.6	936.5	667.7	157.1	3.1	1.000265
7500.0	775.9	18.2	9.6	57.3	922.5	666.9	188•6	3.2	1.000259
8000.0	762.3	17.4	8.8	57.2	909.0	665.9	201.0	5.0	1.000254
8500.0	749.7	16.2	7.9	58.0	896.6	664.5	204.4	7.2	1.000248
9000.0	735.4	15.0	7.0	58.8	884.5	663.5	202.3	6.8	1.000243
9500.0	722.3	13.8	6.1	59.6	872.4	661.6	202.2	6.5	1.000238
10000.0	709.5	12.7	5.2	60.4	860.6	660.2	209.7	6.6	1.000233
10500.0	696.8	11.6	4.4	61.5	848.7	658.9	215.8	7.6	1.000228
11000.0	684.2	10.6	4.0	63.5	830.2	657.7	218.7	9.7	1.000225
11500.0	671.8	9.7	3.5	65.4	823.9	656.6	219.9	11.7	1.000221
12000.0	659.6	8.5	2.9	67.8	812.3	655.2	220.2	13.7	1.000217
12500.0	647.6	7.3	2.3	70.4	801.1	653.6	218.1	14.9	1.000213
13000.0	635.8	6.0	1.6	72.9	790.1	652.3	215.2	15.8	1.000209
13500.0	624.0	4.9	•3	66.0	779.0	650.8	211.7	16.3	1.000203
14000.0	612.5	3.7	-2.3	64.8	761.1	649.3	208.2	16.8	1.000197
14500.0	601.1	2.6	-4.2	60.7	757.4	647.8	209.2	16.4	1.000191
15000.0	589.9	1.5	-4.4	64.8	746.3	646.5	212.0	15.8	1.000186
15500.0	578.9	•7	-4.3	69.1	734.4	645.6	221.7	14.7	1.000186
16000.0	566.1	•3	-5.7	64.1	721.8	645.1	231.6	13.6	1.000181
16500.0	557.4	-5.5	-6.3	64.6	710.3	644.1	242.3	12.5	1.000178
17000.0	549.9	-1.4	-6.7	66.7	699.2	643.1	230.5	10.8	1.000175
17500.0	539.5	-2.3	-6.8	71.2	686.3	642.0	227.6	8.5	1.000172
18000.0	529.4	-3.4	-6.4	79.3	677.6	640.7	259.6	5.8	1.000171
18500.0	516.3	-5.0	-7.1	85.1	668.9	638.8	234.6	2.9	1.000168
19000.0	509.4	-5.7	-8.5	80.2	658.0	637.9	221.8	1.4	1.000164
19500.0	496.7	-6.2	-10.3	73.0	646.9	637.1	156.3	1.6	1.000159
20000.0	487.2	-6.9	-9.5	81.9	630.0	636.4	159.2	2.1	1.000158
20500.0	477.7	-7.8	-9.8	85.4	625.8	635.3	163.6	2.6	1.000155
21000.0	466.5	-8.7	-10.6	86.1	615.9	634.2	177.1	3.4	1.000152
21500.0	459.4	-9.7	-11.5	86.8	608.0	633.0	162.4	4.2	1.000149
22000.0	450.4	-11.8	-12.9	92.0	599.3	630.4	177.7	4.6	1.000146
22500.0	441.6	-12.4	-13.3	93.0	588.8	629.7	174.0	4.8	1.000143
23000.0	433.9	-13.0	-14.0	91.8	570.0	629.0	175.7	4.5	1.000140
23500.0	424.3	-13.5	-15.5	85.1	568.4	623.2	178.0	4.1	1.000137

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 61 0630 MRS MDT
ASCENSION NO. 71

UPPER AIR DATA
19700.071
JALLEN
TABLE 6 Cont'

at occult coordinates
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION (DEGREES) SINE (DEGREES)	WIND DATA	INDEX OF REFRACTION
44000.0	415.9	-14.4	-18.1	72.9	559.2	027.1	193.8	3.9
43500.0	407.7	-15.8	-19.2	74.9	551.1	025.4	204.2	3.9
42500.0	399.5	-16.8	-21.7	65.2	542.3	024.1	205.7	3.6
42500.0	391.5	-17.9	-22.2	68.9	533.8	022.7	207.6	3.4
42500.0	383.6	-19.1	-22.7	72.7	525.5	021.3	209.9	3.3
42500.0	375.9	-20.3	-23.7	74.1	517.3	019.8	207.1	3.4
42700.0	368.2	-21.4	-26.1	65.3	509.1	018.4	200.3	3.7
42750.0	360.7	-21.9	-30.3	46.3	499.9	017.7	188.0	4.2
428000.0	353.3	-22.6	-31.6	43.4	491.0	016.8	171.1	5.1
428500.0	346.1	-23.3	-32.9	40.6	482.3	015.0	105.4	5.8
429000.0	338.9	-24.6	-33.3	43.8	474.8	014.3	162.6	6.3
429500.0	331.9	-26.1	-33.7	48.6	467.9	012.5	163.9	6.7
430000.0	325.0	-27.3	-35.9	43.1	460.3	011.0	166.3	7.0
430500.0	318.2	-28.4	-38.6	36.7	452.8	009.5	155.2	6.8
431000.0	311.5	-29.6	-41.4	30.3	445.4	008.1	140.3	6.9
431500.0	304.9	-30.7	-44.6	23.9	438.1	006.6	131.0	6.3
432000.0	298.5	-31.9	-47.4	19.6	431.0	005.1	122.9	5.5
432500.0	292.0	-33.2	-47.3	22.4	423.8	003.6	121.6	4.1
433000.0	285.7	-34.4	-47.4	25.2	416.8	002.0	129.6	2.3
433500.0	279.5	-35.7	-47.6	27.9	409.9	000.4	138.2	1.5
434000.0	273.4	-36.9	-47.9	30.7	403.2	098.8	137.9	1.5
434500.0	267.5	-38.2	-48.3	33.5	396.6	097.2	145.0	1.8
435000.0	261.7	-39.5	-48.7	36.2	390.1	095.6	153.8	2.6
435500.0	256.0	-40.7	-49.2	39.0	383.7	093.9	150.0	3.3
436000.0	250.4	-42.0	-49.6	41.8	377.4	092.3	152.8	3.5
436500.0	244.8	-43.3	-51.8	38.0**	370.9	090.7	149.9	3.7
437000.0	239.2	-44.6	-54.0	33.7**	364.5	089.0	158.1	5.9
437500.0	233.7	-45.9	-56.3	29.3**	358.3	087.3	162.1	8.3
438000.0	226.4	-47.2	-58.7	25.0**	352.1	085.6	166.0	11.1
438500.0	220.2	-48.5	-61.3	20.7**	346.1	083.9	168.9	14.3
439000.0	214.1	-49.8	-64.2	16.3**	340.4	082.2	172.7	15.6
439500.0	210.1	-51.1	-67.5	12.0**	334.5	080.5	178.8	15.0
440000.0	206.3	-52.4	-71.6	7.6**	328.7	078.8	165.6	14.6
440500.0	203.5	-53.7	-78.1	3.3**	325.1	077.1	193.1	14.5
441000.0	198.9	-55.0			317.5	075.4	200.6	14.6
441500.0	194.1	-56.1			311.7	073.9	206.0	14.1
442000.0	189.5	-57.3			305.9	072.4	211.7	13.8
442500.0	185.0	-58.5			300.3	070.5	212.0	10.9
443000.0	180.7	-59.6			294.7	069.3	271.4	10.1
443500.0	176.3	-59.6			287.0	069.4	271.4	12.8

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 1971 0630 HRS MST
ASCENSION NO. 71

UPPER AIR DATA
1970 Jan 71
JALLEN

GEODETIC COORDINATES
33.10712 LAT UEG
106.49511 LONG DEG

TABLE 6 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	WIND VELOCITY KNOTS	WIND DATA DEGREES (IN) KNOTS	INDEX OF REFRACTION
44000.0	174.1	-59.5	280.0	569.4	306.9	15.2
44500.0	167.9	-60.5	275.1	566.1	313.6	17.7
45000.0	160.9	-61.5	264.7	560.7	313.4	15.4
45500.0	159.9	-62.6	264.5	565.3	313.1	13.1
46000.0	150.0	-63.6	259.4	563.9	326.5	11.6
46500.0	152.2	-64.7	254.4	562.5	347.1	11.5
47000.0	146.5	-65.7	249.3	561.1	60.3	1.000063
47500.0	144.8	-66.7	244.3	559.4	29.0	1.000061
48000.0	141.2	-67.7	239.4	558.4	51.8	1.000060
48500.0	137.7	-69.7	234.5	557.1	71.2	1.000059
49000.0	134.2	-69.6	229.8	555.6	93.5	1.000058
49500.0	130.9	-70.6	225.1	554.5	105.7	1.000057
50000.0	127.6	-70.4	219.2	554.8	111.5	1.000056
50500.0	124.4	-70.2	213.5	555.1	119.6	1.000055
51000.0	121.3	-69.9	207.9	555.4	129.7	6.5
51500.0	118.2	-69.7	202.4	555.6	141.9	6.0
52000.0	115.2	-69.5	197.1	555.9	168.6	5.5
52500.0	112.3	-69.5	192.2	555.9	194.2	6.2
53000.0	109.5	-69.7	187.6	555.6	202.7	6.7
53500.0	106.8	-70.0	183.0	555.3	203.7	6.6
54000.0	104.1	-70.2	176.7	555.0	193.7	6.4
54500.0	101.5	-70.4	174.4	554.7	171.4	6.8
55000.0	98.9	-69.1	168.8	559.0	150.9	8.5
55500.0	96.5	-68.2	164.0	557.7	144.6	9.5
56000.0	94.1	-67.4	159.3	558.6	141.7	10.3
56500.0	91.7	-66.6	154.7	559.8	135.2	10.4
57000.0	89.4	-67.0	151.2	559.5	119.0	9.5
57500.0	87.0	-67.5	147.7	559.7	102.0	9.4
58000.0	85.0	-68.0	144.4	558.1	95.4	1.000033
58500.0	82.9	-68.4	141.1	557.5	91.7	1.000032
59000.0	80.9	-67.9	137.3	558.1	89.2	1.000031
59500.0	78.9	-67.5	135.6	558.7	37.3	1.000030
60000.0	76.9	-66.5	129.6	560.1	65.5	1.000029
60500.0	75.0	-64.4	125.2	562.6	79.1	19.0
61000.0	72.2	-64.6	122.2	562.6	74.1	22.4
61500.0	71.4	-65.0	119.5	562.6	73.1	25.0
62000.0	69.6	-65.4	116.7	561.3	76.1	26.2
62500.0	67.9	-65.2	113.9	561.6	78.9	27.6
63000.0	66.3	-64.4	110.6	562.6	50.8	26.4
63500.0	64.7	-63.0	107.2	564.7	32.0	25.1

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 61 0630 HRS MDT
ASCENSION NO. 71

UPPER AIR DATA
19700311071
JALLEN
TABLE 6 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEPOINT DEGREES	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND DATA KNOTS	INDEX OF REFRACTION
64000.0	63.1	-61.6			103.9	590.7	95.6	25.6	1.000023
64500.0	61.6	-60.1			100.7	568.6	89.0	28.6	1.000022
65000.0	60.1	-58.7			97.6	570.5	91.7	31.7	1.000022
65500.0	58.7	-58.8			95.3	570.4	90.2	32.6	1.000021
66000.0	57.3	-59.0			93.1	570.1	100.6	33.4	1.000021
66500.0	55.9	-59.2			91.0	569.9	104.4	35.3	1.000020
67000.0	54.6	-59.4			88.9	569.6	105.2	29.9	1.000020
67500.0	53.3	-59.6			86.9	569.4	106.0	26.5	1.000019
68000.0	52.0	-58.7			84.5	570.5	104.9	24.9	1.000019
68500.0	50.8	-57.7			82.0	571.9	102.0	24.4	1.000018
69000.0	49.6	-56.9			79.8	572.9	99.0	24.0	1.000018
69500.0	48.4	-56.6			77.9	573.2	96.9	23.9	1.000017
70000.0	47.3	-56.4			76.0	573.6	94.9	23.7	1.000017
70500.0	46.2	-56.1			74.1	574.0	92.9	23.5	1.000016
71000.0	45.1	-55.6			72.3	574.3	90.8	23.0	1.000016
71500.0	44.0	-55.6			70.5	574.7	88.5	22.4	1.000016
72000.0	43.0	-55.3			68.8	575.0	87.0	22.4	1.000015
72500.0	42.0	-55.0			67.1	575.4	86.9	23.2	1.000015
73000.0	41.0	-54.8			65.5	575.7	86.8	24.0	1.000015
73500.0	40.1	-54.5			63.9	576.1	86.8	24.3	1.000014
74000.0	39.1	-54.2			62.3	576.4	86.9	24.2	1.000014
74500.0	38.2	-54.0			60.8	576.8	87.0	24.1	1.000014
75000.0	37.3	-53.7			59.3	577.1	87.2	24.1	1.000013
75500.0	36.5	-53.4			57.8	577.5	87.6	24.1	1.000013
76000.0	35.6	-53.2			56.4	577.8	88.0	24.1	1.000013
76500.0	34.8	-52.9			55.0	578.2	87.6	24.3	1.000012
77000.0	34.0	-52.6			53.7	578.5	85.9	25.1	1.000012
77500.0	33.2	-52.3			52.4	579.9	84.3	25.8	1.000012
78000.0	32.4	-52.1			51.1	579.2	83.2	26.7	1.000011
78500.0	31.7	-51.8			49.8	579.6	84.1	28.2	1.000011
79000.0	30.9	-51.5			48.6	579.9	85.0	29.7	1.000011
79500.0	30.2	-51.3			47.4	580.3	85.8	31.2	1.000011
80000.0	29.5	-51.2			46.3	580.4	88.7	31.4	1.000010
80500.0	28.8	-51.1			45.2	580.5	91.7	31.6	1.000010
81000.0	28.2	-51.1			44.2	580.6	94.6	31.8	1.000010
81500.0	27.5	-51.0			43.2	580.6	95.7	31.9	1.000010
82000.0	26.9	-51.0			42.2	580.7	96.0	31.9	1.000009
82500.0	26.3	-50.9			41.2	580.8	96.3	31.8	1.000009
83000.0	25.7	-50.9			40.2	580.9	95.5	32.6	1.000009
83500.0	25.1	-50.8			39.3	580.9	93.6	34.3	1.000009

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 61 06 30 HRS MDT
ASCENSION 140. 71

UNIV. AIR. DATA
19700.0001
JALLEN

GEOD. COORDINATES
33.16712 LAT UG
106.49511 LONG UG

TABLE 6 Cont'd

GEOD. COORDINATES	PRESSURE ATMOSPHERE	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GR/CUBIC METER	STATE OF SOUND METER	"IN" DATA DIRECTION DEGREES (IN)	"IN" DATA SPEED KNOTS (IN)	INDEX OF REFRACTION
000000.0	24.5	-50.7	36.1	581.0	91.9	36.1	1.000009	
04500.0	25.9	-50.6	37.5	581.1	90.4	37.6	1.000008	
09000.0	25.4	-50.0	36.5	582.0	89.5	38.3	1.000008	
13500.0	24.9	-49.4	35.6	582.8	88.0	39.0	1.000008	
18000.0	24.4	-46.7	34.7	583.6	87.6	39.8	1.000008	
22500.0	21.8	-48.1	33.8	584.5	87.6	40.8	1.000008	
27000.0	21.4	-47.4	33.0	585.3	87.5	41.9	1.000007	
31500.0	20.9	-46.8	32.1	586.1	87.4	42.9	1.000007	
36000.0	20.4	-46.1	31.3	587.0	87.0	44.1	1.000007	
40500.0	19.9	-45.5	30.5	587.7	86.6	45.2	1.000007	
45000.0	19.5	-45.1	29.0	588.3	86.1	46.4	1.000007	
49500.0	19.1	-44.7	29.1	588.8	86.4	47.6	1.000006	
54000.0	18.6	-44.3	28.4	589.3	86.5	49.2	1.000006	
58500.0	18.2	-43.9	27.7	589.9	90.4	50.9	1.000006	
63000.0	17.8	-43.5	27.0	590.4	92.2	52.5	1.000006	
67500.0	17.4	-43.1	26.4	590.9	94.1	51.1	1.000006	
72000.0	17.0	-42.7	25.8	591.5	90.1	49.4	1.000006	
76500.0	16.7	-42.2	25.1	592.0	98.3	47.7	1.000006	
81000.0	16.3	-41.8	24.5	592.5		49.0	1.000005	
85500.0	15.9	-41.4	24.0	593.0		48.5	1.000005	
90000.0	15.6	-41.0	23.4	593.5		48.0	1.000005	
94500.0	15.2	-40.6	22.8	594.1		47.5	1.000005	
99000.0	14.9	-40.2	22.3	594.6		47.0	1.000005	

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 61 0630 HRS MDT
ASCESSION NO. 71

MANDATORY LEVELS

1970031071

JALLEN

6E00T TIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

Table 7

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE DEGREES CENTIGRAU. AIR DEPOINT	REL.HUM. PERCENT	WIND DATA DEGREES (TN) WIRK DIRECTION	SPEED KNOTS
650.0	4911.	21.8	59.	176.2	1.6
600.0	6634.	19.4	10.9	145.4	5.3
750.0	8450.	16.3	8.0	204.2	7.0
700.0	10364.	11.8	4.5	214.7	7.0
650.0	12388.	7.5	2.4	218.7	14.7
600.0	14535.	2.5	-4.4	209.3	10.4
550.0	16830.	-1.1	-6.0	248.8	11.5
500.0	19304.	-6.0	-10.6	172.2	1.3
450.0	21991.	-12.0	-12.9	177.0	4.6
400.0	24930.	-16.7	-21.7	205.0	2.6
350.0	28179.	-22.9	-32.7	167.3	5.5
300.0	31822.	-31.6	-47.4	125.4	5.7
250.0	35963.	-42.1	-49.8	152.6	3.5
200.0	40782.	-54.7	42.	198.0	14.5
175.0	43547.	-59.5	300.3	15.4	
150.0	46674.	-65.3	358.0	12.1	
125.0	50258.	-70.2	117.7	7.5	
100.0	54617.	-69.4	159.0	7.5	
80.0	59020.	-67.7	88.5	15.1	
70.0	61683.	-65.4	75.4	25.9	
60.0	64799.	-58.6	91.7	31.7	
50.0	68554.	-57.0	100.3	24.2	
40.0	73216.	-54.5	88.8	24.3	
30.0	79307.	-51.2	88.4	31.3	
25.0	83199.	-50.8	93.5	34.4	
20.0	88014.	-45.6	86.7	45.0	
15.0	94378.	-40.3			

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 1950 HRS MDT
ASCENSUR. 10. 72

SIGNIFICANT LEVEL DATA
19700 FEET
JALLEN

GEODDITIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 8

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE DEGREES C	AIR DEWPOINT CENTIGRADE	REL. HUM. PERCENT
375.4	4051.0	27.0	14.1	45.0
671.8	4170.5	25.4	13.6	48.0
350.0	4899.1	22.6	13.1	55.0
755.0	8253.7	16.1	6.8	34.0
700.0	10352.7	11.6	5.0	34.0
933.0	13097.2	6.5	0.8	67.0
604.8	14321.4	3.1	0.5	63.0
544.6	17098.7	-1.0	-0.5	66.0
500.0	19321.4	-6.4	-9.3	80.0
490.0	19841.0	-7.1	-7.5	85.0
463.8	21244.9	-9.8	-14.7	67.0
431.3	23079.5	-13.1	-15.7	61.0
400.0	24964.1	-14.7	-22.3	52.0
396.6	25176.7	-15.0	-26.4	37.0
388.3	25701.7	-16.6	-25.0	48.0
366.9	27098.5	-18.7	-33.6	25.0
354.6	29330.9	-25.2	-34.3	42.0
306.0	31910.2	-31.1	-42.0	31.0
276.8	33772.3	-35.5	-46.0	30.0
266.0	34680.5	-37.7	-40.2	40.0
256.0	36078.9	-41.3	-50.0	38.0
227.0	38216.0	-46.0		
200.0	40351.6	-52.6		
182.6	42871.8	-56.6		
169.4	44433.3	-58.6		
156.0	46916.7	-64.8		
136.6	48788.0	-67.4		
125.6	50454.6	-67.9		
109.5	53145.2	-72.4		
105.4	53883.8	-70.6		
102.2	54493.8	-66.3		
100.0	54934.6	-65.5		
81.4	59040.7	-68.0		
76.0	62047.0	-66.2		
66.4	65043.3	-60.1		
50.0	69269.0	-56.9		
38.0	74812.7	-49.4		
36.4	79634.5	-50.7		
28.4	81105.4	-49.4		

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 81 0950 HRS MDT
ASCENSION NO. 72

UPPER AIR DATA
1970030072
JALLEN

GEOMETRIC ALTITUDE
FEET MSL
MILLIBARS
DEGREES CENTIGRADE

GEOMETRIC ALTITUDE FEET MSL	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	SPLNTY GM/CUBIC METER	SOUND KNOTS	DIRECTION DEGREES (IN)	IND. DATA SPD KNOTS	INSTR. OF REFRACTION
4051.0	875.4	27.0	14.1	45.0	1004.0	677.3	*0	1.0010292
4500.0	861.9	24.1	13.4	51.2	1003.1	674.0	147.0	1.0010290
5000.0	847.0	22.4	12.9	55.0	991.7	672.0	147.0	1.0010266
5500.0	832.1	21.4	12.0	54.8	977.8	670.8	147.0	1.0010279
6000.0	817.6	20.5	11.0	54.7	964.1	669.6	150.1	1.0010273
6500.0	803.3	19.5	10.1	54.5	950.6	668.4	153.0	1.0010267
7000.0	789.2	18.5	9.2	54.4	937.5	667.2	157.7	6.6
7500.0	775.4	17.6	8.2	54.2	924.2	666.0	162.5	7.4
8000.0	761.8	16.6	7.3	54.1	911.3	664.8	166.7	7.7
8500.0	748.3	15.6	6.6	55.2	898.5	663.6	169.0	8.2
9000.0	735.0	14.5	6.2	57.6	885.7	662.4	165.3	8.6
9500.0	721.8	13.4	5.8	59.9	873.2	661.1	163.2	9.0
10000.0	709.0	12.4	5.4	62.3	860.9	660.8	165.7	8.7
10500.0	696.2	11.3	4.8	64.2	848.6	658.6	169.0	8.2
11000.0	683.6	10.4	4.0	64.7	836.1	657.5	166.5	6.8
11500.0	671.2	9.5	3.3	65.3	823.7	656.4	205.5	6.0
12000.0	659.0	8.5	2.5	65.8	811.5	655.2	219.2	6.7
12500.0	647.0	7.6	1.7	66.3	799.6	654.1	211.2	7.8
13000.0	635.3	6.7	1.0	66.9	787.0	653.0	211.1	9.6
13500.0	623.6	5.4	0.8	72.3	776.9	651.5	213.8	10.7
14000.0	612.1	4.0	0.7	78.8	766.3	649.8	218.2	11.3
14500.0	600.7	2.8	0.1	81.9	755.4	648.5	223.5	11.9
15000.0	589.5	2.1	-1.2	78.8	743.4	647.5	228.6	12.7
15500.0	578.5	1.4	-2.4	75.8	731.7	646.5	230.1	12.9
16000.0	567.7	.6	-3.7	72.7	720.1	645.6	231.2	13.0
16500.0	557.0	-1	-5.0	69.0	708.7	644.7	229.6	11.6
17000.0	546.6	-0.9	-6.3	66.6	697.5	643.7	227.6	10.3
17500.0	536.3	-2.0	-7.0	68.5	687.2	642.4	226.5	9.1
18000.0	526.1	-3.2	-7.6	71.7	677.1	640.9	223.6	8.3
18500.0	516.0	-4.4	-8.2	74.8	667.3	639.4	218.0	8.7
19000.0	506.2	-5.6	-8.8	78.0	657.6	638.0	210.9	9.6
19500.0	496.5	-6.6	-9.3	81.0	647.6	636.7	202.6	11.2
20000.0	487.0	-7.4	-10.1	81.2	636.9	635.6	197.9	12.4
20500.0	477.5	-8.4	-11.9	75.5	627.0	634.5	194.9	13.2
21000.0	468.3	-9.3	-13.8	69.0	617.5	633.3	193.7	12.9
21500.0	459.1	-10.3	-14.8	68.9	607.5	632.2	194.3	11.4
22000.0	450.1	-11.2	-15.1	72.8	597.6	631.1	198.0	10.1
22500.0	441.3	-12.1	-15.3	76.6	587.9	630.0	206.0	9.1
23000.0	432.7	-13.0	-15.6	80.4	578.4	628.9	215.1	9.4
23500.0	424.1	-13.5	-17.0	74.5	568.1	628.3	222.5	10.6

TABLE 9

GEODETIC COORDINATES
23.16712 LAT DEG
106.49511 LONG DEG

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 11 0950 HRS MDT
ASCENSION NO. 12

UPPER AIR DATA
1970030072
JALLEN

TABLE 9 Con't

GEOPHYSIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	DESP. HUM. GM/CUBIC METER	SOUND KNOTS	WIND DATA DEGREES (LTN) WIND (LTN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	415.7	-13.9	-18.7	66.8	557.9	627.7	224.0	11.1
24500.0	407.5	-14.3	-20.5	59.1	547.1	627.1	225.7	11.2
25000.0	399.4	-14.8	-22.9	49.5	530.0	620.5	219.3	11.0
25500.0	391.5	-16.0	-25.4	43.8	529.9	625.0	212.3	10.8
26000.0	383.6	-17.0	-26.6	43.1	521.5	625.7	204.2	10.5
26500.0	375.9	-17.8	-29.5	34.9	512.6	622.7	194.9	10.2
27000.0	368.4	-18.6	-33.0	26.6	503.6	621.7	180.2	10.1
27500.0	360.9	-19.9	-33.6	28.1	496.2	620.1	179.8	9.7
28000.0	353.5	-21.3	-33.6	31.9	486.8	618.3	173.4	9.4
28500.0	346.3	-22.8	-33.8	35.7	481.0	616.5	171.5	8.9
29000.0	339.2	-24.2	-34.1	39.5	474.5	614.8	169.3	8.3
29500.0	332.2	-25.6	-34.8	41.3	467.3	613.1	169.2	8.3
30000.0	325.3	-26.7	-36.4	39.1	459.7	611.6	169.3	8.4
30500.0	318.4	-27.9	-38.0	37.0	452.2	610.2	170.9	8.7
31000.0	311.8	-29.0	-39.6	34.9	444.8	608.8	172.6	8.9
31500.0	305.3	-30.2	-41.2	32.7	437.5	607.3	172.0	9.4
32000.0	298.8	-31.3	-42.8	31.0	430.4	605.9	170.9	9.8
32500.0	292.4	-32.5	-43.9	30.7	423.3	604.4	168.1	10.7
33000.0	286.2	-33.7	-45.0	30.4	416.3	602.9	165.2	11.8
33500.0	280.1	-34.9	-46.0	30.1	409.4	601.4	163.6	12.2
34000.0	274.1	-36.1	-46.6	32.5	402.6	599.9	163.1	12.1
34500.0	268.1	-37.3	-46.3	38.0	395.9	596.4	162.4	12.3
35000.0	262.3	-38.5	-47.1	39.5	389.3	596.4	161.7	12.7
35500.0	256.5	-39.8	-48.4	38.8	382.9	595.1	161.4	13.2
36000.0	250.9	-41.1	-49.8	38.1	376.6	593.5	163.2	13.7
36500.0	245.3	-42.2	-52.7	30.5**	370.0	592.0	164.9	14.2
37000.0	239.8	-43.3	-56.4	21.6**	363.5	590.6	168.9	13.9
37500.0	234.5	-44.4	-61.5	12.7**	357.1	589.2	175.0	13.3
38000.0	229.2	-45.5	-70.9	3.8**	350.8	587.4	161.5	12.6
38500.0	224.0	-46.7			344.6	585.5	163.2	13.7
39000.0	218.9	-47.9			338.5	584.7	164.9	14.2
39500.0	213.9	-49.1			332.6	583.1	231.1	3.4
40000.0	209.0	-50.3			326.7	581.6	302.0	2.9
40500.0	204.2	-51.5			321.0	580.0	327.3	3.7
41000.0	199.5	-52.7			315.3	578.4	309.1	3.3
41500.0	194.9	-53.7			310.5	574.7	204.3	6.4
42000.0	190.3	-54.8			309.4	577.1	303.1	3.5
42500.0	185.8	-56.8			303.6	575.7	348.0	3.2
43000.0	181.5	-56.8			297.9	574.3	321.3	2.9
43500.0	177.2	-57.4			292.2	573.1	326.7	5.5
					280.1	572.2	336.0	6.5

** AT LAST ONE ASSUMED RELATIVE RELATIVITY VALUE WAS USED IN CALCULATION.

STATION ALTITUDE 4051.00 FEET MSL
16 JULY 61 0950 HRS MDT
ASCENSION NO. 12

UPPER AIR DATA
1970030072
JALLEN

OUTLINE COORDINATES
53.16712 LAT LEG
106.49511 LON LEG

TABLE 9 Cont

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEPOINT PERCENT	REL. HUM. PERCENT	SOUND METER	SOUND DECIBELS (IN)	WIND DATA DIRECTION DEGREES	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4400.0	17.0	-58.0			280.1	571.4	2.9	10.1	1.000062
4450.0	16.8	-58.0			274.4	570.4	9.4	10.8	1.000061
4500.0	16.8	-60.0			269.3	569.8	15.6	11.1	1.000060
4550.0	16.0	-61.3			264.3	567.1	4.6	9.8	1.000059
4600.0	15.6	-62.5			259.5	565.4	36.1	6.8	1.000058
4650.0	15.1	-63.8			254.7	563.7	37.1	9.0	1.000057
4700.0	14.9	-64.9			249.9	562.2	37.3	9.2	1.000056
4750.0	14.5	-65.6			244.5	561.2	40.4	8.4	1.000054
4800.0	14.2	-66.3			239.3	560.3	58.1	5.7	1.000053
4850.0	13.8	-67.0			234.2	559.4	94.9	4.3	1.000052
4900.0	13.5	-67.5			228.9	558.7	124.0	4.6	1.000051
4950.0	13.1	-67.6			223.4	558.5	139.2	6.0	1.000050
5000.0	12.8	-67.8			218.0	558.3	147.6	7.3	1.000049
5050.0	12.5	-68.0			212.8	558.0	141.7	7.6	1.000047
5100.0	12.2	-68.8			208.3	556.9	136.3	8.0	1.000046
5150.0	11.9	-69.6			203.8	555.8	132.9	8.5	1.000045
52000.0	11.6	-70.5			199.5	554.6	131.0	9.0	1.000044
52500.0	11.2	-71.3			195.3	553.5	128.6	9.5	1.000043
53000.0	11.0	-72.2			191.2	552.3	121.4	10.7	1.000043
53500.0	10.7	-71.5			185.8	553.2	115.6	11.9	1.000041
54000.0	10.4	-69.8			179.6	555.5	116.0	11.9	1.000040
54500.0	10.2	-66.3			172.1	560.3	119.2	11.3	1.000038
55000.0	9.7	-65.5			167.2	561.3	123.3	10.3	1.000037
55500.0	9.2	-65.8			163.5	560.9	131.7	8.0	1.000036
56000.0	9.0	-66.1			159.5	560.5	146.2	6.0	1.000036
56500.0	9.5	-66.5			155.6	560.1	148.1	5.6	1.000035
57000.0	9.0	-66.8			152.2	559.7	138.5	6.0	1.000034
57500.0	8.7	-67.1			148.6	559.3	130.5	6.7	1.000033
58000.0	8.3	-67.4			145.2	558.9	118.9	9.1	1.000032
58500.0	8.0	-67.6			141.8	558.4	112.4	11.8	1.000031
59000.0	7.9	-68.0			138.5	558.0	107.0	13.6	1.000031
59500.0	7.5	-67.7			134.9	558.4	101.8	14.7	1.000030
60000.0	7.1	-67.4			131.4	558.8	98.5	15.9	1.000029
60500.0	7.0	-67.1			127.9	559.2	101.2	17.2	1.000028
61000.0	7.3	-66.8			124.0	559.6	103.5	18.5	1.000028
61500.0	7.1	-66.5			121.3	560.0	107.9	20.2	1.000027
62000.0	7.0	-66.2			118.1	560.4	112.3	22.1	1.000026
62500.0	6.9	-65.3			114.7	561.7	114.9	23.6	1.000026
63000.0	6.8	-64.3			111.4	563.1	111.8	23.4	1.000025
63500.0	6.5	-63.2			108.2	564.4	108.6	23.0	1.000024

STATION ALTITUDE 4951.0 FEET MSL
16 JULY 11 0950 MRS MDT
ASWLN501. NO. 72

UPPLR AIR DATA
19703007Z
JALLEN

LEDD TIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 9 Con't

GEOPH. THIC	PRESSURE	TEMPERATURE	REL. HUM.	DENSITY	SPEED OF	INDEX
ALTITUDE	MM. MILLIARS	AIR DEGREES	DEGREE	GM/CUBIC	SOUND METER	OF
MSL FEET	DEGREES	CENTIGRADE	PERCENT	METER	KNOTS	REFRACTION
64000.0	65.6	-62.2	66.6	105.0	565.6	1.0000023
64500.0	62.0	-61.2	102.0	567.2	102.4	22.1
65000.0	60.5	-60.2	94.0	568.5	99.4	21.7
65500.0	59.1	-59.7	90.4	569.1	98.9	22.0
66000.0	57.7	-59.3	94.0	569.7	99.0	22.4
66500.0	56.3	-58.9	91.6	570.2	99.1	22.8
67000.0	55.0	-58.5	89.2	570.8	100.2	23.6
67500.0	53.7	-58.1	86.9	571.3	101.3	24.5
68000.0	52.4	-57.7	84.7	571.8	101.8	25.3
68500.0	51.1	-57.3	82.5	572.4	100.4	25.9
69000.0	49.9	-56.9	80.4	572.9	99.0	26.6
69500.0	48.6	-56.2	78.3	573.4	97.3	27.1
70000.0	47.6	-55.6	76.3	574.6	94.6	27.1
70500.0	46.5	-54.9	74.3	575.5	92.0	27.1
71000.0	45.4	-54.3	72.3	576.5	90.0	27.3
71500.0	44.4	-53.7	70.5	577.2	88.7	27.5
72000.0	43.4	-53.0	68.6	578.0	87.4	27.7
72500.0	42.4	-52.4	66.8	578.9	86.7	27.9
73000.0	41.4	-51.7	65.1	579.7	86.2	28.1
73500.0	40.4	-51.1	63.4	580.5	85.7	28.2
74000.0	39.5	-50.4	61.8	581.4	87.4	28.8
74500.0	39.6	-49.8	60.1	582.2	89.4	29.5
75000.0	37.7	-49.5	56.7	582.7	90.9	30.2
75500.0	36.8	-49.6	57.4	582.5	91.9	30.8
76000.0	36.0	-49.7	56.1	582.3	92.8	31.5
76500.0	35.1	-49.9	54.8	582.1	93.7	32.2
77000.0	34.3	-50.0	53.6	582.0	93.4	32.4
77500.0	33.6	-50.1	52.4	581.6	92.6	32.4
78000.0	32.8	-50.3	51.2	581.6	91.8	32.3
78500.0	32.0	-50.4	50.1	581.4	90.1	31.2
79000.0	31.3	-50.5	49.0	581.3	89.0	31.1
79500.0	30.6	-50.7	47.9	581.1	88.7	31.0
80000.0	29.9	-50.4	46.7	581.5	88.0	30.9
80500.0	29.2	-49.9	45.6	582.0	87.5	30.8
81000.0	28.5	-49.5	44.5	582.6	87.0	30.7

STATION ALTITUDE 4651.00 FT MSL
16 JULY 1950 0950 HRS MDT
ASSEMBLION NO. 72

MANDATORY LEVELS
19700.00072
JALLEN

GEOMETRIC COORDINATES
33.16712 LAT UEG
106.49511 LONG E

TABLE 10

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE DEGREES CENTIGRADE	W.L.HUM. PERCENT	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4896.	22.6	13.1	55.	147.8 2.4
809.6	6620.	19.3	9.9	54.	154.9 6.7
750.0	8432.	15.7	6.7	55.	189.5 8.1
700.0	10343.	11.6	5.0	64.	187.5 8.5
650.0	12367.	7.8	1.9	60.	211.2 7.3
600.0	14518.	2.8	-0.0	62.	223.8 12.0
550.0	16818.	-6.6	-5.8	66.	228.4 10.7
500.0	19295.	-6.4	-9.5	60.	205.5 10.6
450.0	21978.	-11.2	-15.1	73.	198.1 10.1
400.0	24925.	-14.7	-22.3	52.	240.0 11.1
350.0	28198.	-22.0	-33.7	34.	172.0 9.1
300.0	31848.	-31.1	-42.0	31.	171.1 9.7
250.0	36001.	-41.3	-50.0	36.	163.4 13.8
200.0	40854.	-52.6	-52.6	336.9	3.6
175.0	43648.	-57.7	-57.7	359.2	9.8
150.0	46791.	-64.8	-64.8	37.2	9.1
125.0	50405.	-68.1	-68.1	141.4	7.6
100.0	54767.	-65.5	-65.5	122.1	10.7
80.0	59191.	-67.8	-67.8	103.2	14.4
70.0	61836.	-66.2	-66.2	112.4	22.2
60.0	64949.	-60.0	-60.0	98.9	21.7
50.0	68711.	-56.9	-56.9	99.2	26.5
40.0	73413.	-50.8	-50.8	86.2	28.4
30.0	79580.	-50.4	-50.4		

STATION ALTITUDE 4126.59 FEET MSL
 16 JULY 81 0950 HRS MDT
 ASCENSION NO. 162

SIGNIFICANT LEVEL DATA
 1970101010Z
 HOLLOWAY

GEODETIC COORDINATES,
 32.88855 LAT DEG
 196.09965 LON DEG

TABLE 11

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
876.1	4126.6	25.2	14.9	53.0
874.2	4189.4	26.0	15.7	53.0
850.0	4999.3	23.3	12.9	51.0
820.4	6013.4	21.5	10.9	51.0
794.6	6321.9	19.8	10.2	54.0
756.4	8311.4	16.8	6.2	57.0
700.0	10468.7	12.6	4.8	59.0
680.8	11234.7	10.9	3.0	58.0
626.2	13508.6	5.8	-1.1	61.0
596.3	14819.1	2.5	-2.4	70.0
565.6	16220.9	0.3	-0.2	77.0
540.4	17419.0	-2.2	-7.1	89.0
505.0	19179.2	-5.9	-9.1	78.0
500.0	19435.7	-6.4	-9.9	76.0
480.4	20460.7	-8.7	-14.0	82.0
465.8	21246.0	-10.2	-13.8	75.0
451.8	22020.3	-10.2	-14.6	70.0
429.0	23329.8	-11.9	-19.9	51.0
400.0	25082.8	-15.1	-24.1	46.0
357.4	27851.8	-21.3	-32.3	36.0
324.4	30181.9	-26.2	-40.3	25.0
300.0	32026.0	-31.1	-37.5	33.0
281.0	33543.0	-34.5	-42.6	43.0
250.0	36200.6	-40.5	-49.9	35.0
200.0	41082.5	-52.4		
163.4	45290.4	-62.6		
150.0	47016.1	-66.0		
138.8	48559.7	-68.4		
135.0	49112.2	-65.8		
120.0	51458.5	-68.1		
109.8	53205.2	-71.2		
100.0	55045.3	-67.8		
93.8	56322.5	-65.6		
87.8	57645.9	-66.5		
82.2	58958.8	-67.7		
77.0	60268.7	-64.0		
71.6	61734.5	-65.4		
70.0	62188.3	-65.2		
59.4	65544.2	-58.6		
50.0	69139.9	-56.3		

STATION ALTITUDE 4126.59 FEET MSL
16 JULY 81 0950 HRS MDT
ASCENSION NO. 162

SIGNIFICANT LEVEL DATA

19700.0162
HOLLOWAY

0.000000 COORDINATES
32.888865 LAT DEG
106.09965 LON DEG

TABLE 11

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
41.0	73356.6	-51.0	
30.0	80103.3	-49.3	
22.6	86276.2	-47.1	
20.0	88957.9	-46.9	
15.2	95092.2	-38.5	
12.8	99002.8	-38.8	

STATION ALTITUDE 4126.59 FEET MSL
16 JULY 01 0950 HRS MDT
ASCENSION NO. 162

UPPER AIR DATA
197001162
HOLLOWAY,

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 12

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	IND. DATA SPEED KNOTS	INDEX OF REFRACTION
4126.6	870.1	25.2	14.9	53.0	1015.5	675.4	180.0	1.0	1.000299
4500.0	864.8	25.0	14.5	52.2	1003.3	675.1	178.9	3.9	1.000294
5000.0	850.0	23.3	12.6	51.0	992.3	673.0	178.4	6.6	1.000284
5500.0	835.3	22.4	11.8	51.0	978.3	671.9	178.2	9.3	1.000278
6000.0	820.4	21.5	11.0	51.0	964.5	670.8	178.6	11.5	1.000272
6500.0	806.5	20.6	10.6	52.6	950.7	669.7	181.6	11.0	1.000268
7000.0	792.4	19.6	10.1	54.2	937.3	668.6	182.7	10.5	1.000264
7500.0	779.5	18.6	9.4	55.2	924.4	667.3	177.4	10.0	1.000259
8000.0	764.8	17.5	8.7	56.3	911.7	666.0	171.9	9.3	1.000254
8500.0	751.3	16.4	7.9	57.2	898.9	664.7	166.0	8.6	1.000249
9000.0	737.9	15.5	7.2	57.6	886.1	663.6	165.0	7.4	1.000244
9500.0	724.8	14.5	6.4	58.4	873.4	662.4	167.6	6.1	1.000239
10000.0	711.9	13.5	5.6	58.6	860.9	661.2	181.6	5.0	1.000234
10500.0	699.2	12.5	4.7	59.0	848.7	660.0	203.3	4.3	1.000229
11000.0	686.6	11.4	3.5	58.3	836.9	658.6	218.4	4.6	1.000223
11500.0	674.2	10.3	2.5	58.3	825.2	657.2	230.6	5.2	1.000218
12000.0	661.9	9.2	1.6	59.0	813.5	655.9	225.0	7.1	1.000214
12500.0	649.9	8.1	.7	59.7	802.0	654.5	221.7	9.1	1.000210
13000.0	638.0	6.9	-2	60.3	790.7	653.2	220.6	10.8	1.000205
13500.0	626.4	5.8	-1.1	61.0	779.6	651.8	219.8	12.3	1.000201
14000.0	614.8	4.6	-1.6	64.4	768.6	650.3	218.7	12.3	1.000198
14500.0	603.4	3.3	-2.1	67.8	757.9	648.8	217.1	12.0	1.000195
15000.0	592.2	2.2	-2.5	70.9	746.8	647.5	214.6	11.2	1.000192
15500.0	581.2	1.4	-2.8	73.4	735.0	646.6	216.0	10.2	1.000189
16000.0	570.3	.6	-3.1	75.9	723.3	645.7	219.9	8.9	1.000186
16500.0	559.6	-.3	-4.1	75.1	712.3	644.5	222.0	7.0	1.000182
17000.0	549.1	-1.3	-5.7	71.8	701.8	643.2	224.1	4.8	1.000177
17500.0	538.7	-2.4	-7.2	69.4	691.3	641.9	215.0	3.8	1.000172
18000.0	528.4	-3.4	-7.7	72.0	680.8	640.6	198.0	3.4	1.000169
18500.0	518.4	-4.5	-8.3	74.5	670.5	639.3	194.2	4.4	1.000167
19000.0	508.5	-5.5	-8.9	77.4	660.4	638.1	194.3	5.7	1.000164
19500.0	498.7	-6.5	-10.2	75.1	650.3	636.8	193.4	6.9	1.000160
20000.0	489.1	-7.7	-12.5	68.3	640.6	635.3	192.5	8.1	1.000155
20500.0	479.7	-8.8	-14.6	62.7	631.1	633.9	193.7	8.7	1.000151
21000.0	470.3	-9.7	-14.0	70.9	621.0	632.8	194.9	9.3	1.000150
21500.0	461.2	-10.2	-14.0	73.4	609.9	632.3	201.4	8.8	1.000147
22000.0	452.2	-10.2	-14.6	70.1	598.1	632.3	208.0	8.4	1.000144
22500.0	443.3	-10.8	-16.5	63.0	587.9	631.4	212.8	8.7	1.000140
23000.0	434.6	-11.5	-18.5	55.8	577.9	630.6	216.3	9.0	1.000137
23500.0	426.1	-12.2	-20.3	50.5	568.2	629.6	217.1	9.1	1.000133

STATION ALTITUDE 4126.59 FEET MSL
16 JULY 81 0950 HRS MDT
ASCENSION NO. 162

UPPER AIR DATA
1970010162
HOLLOMAN

TABLE 12

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEPOINT CENTIGRADE	REL.HUM. PERCENT	SOUND METER	WIND DATA		INDEX OF REFRACTION
						GM/CUBIC METER	DEGREES (IN)	
24000.0	417.7	-13.1	-21.5	49.1	559.0	628.5	217.0	9.0
24500.0	409.4	-14.0	-22.7	47.7	549.9	627.4	214.0	8.6
25000.0	401.3	-14.9	-23.9	46.2	541.0	626.3	210.6	8.2
25500.0	393.3	-16.0	-25.3	44.5	532.4	624.9	206.3	8.0
26000.0	385.4	-17.2	-26.8	42.7	524.1	623.5	202.4	7.8
26500.0	377.6	-18.3	-28.3	40.9	515.8	622.1	199.6	7.6
27000.0	370.0	-19.4	-29.8	39.1	507.7	620.8	194.3	7.2
27500.0	362.6	-20.5	-31.3	37.3	499.7	619.4	179.5	6.5
28000.0	355.2	-21.6	-32.8	35.3	491.7	618.0	163.6	6.1
28500.0	347.9	-22.7	-34.5	32.9	483.7	616.7	149.1	5.8
29000.0	340.7	-23.7	-36.1	30.6	475.7	615.4	137.7	6.0
29500.0	333.7	-24.8	-37.9	28.2	467.9	614.1	130.7	6.5
30000.0	326.9	-25.8	-39.6	25.9	460.3	612.7	125.9	7.0
30500.0	320.1	-27.0	-39.3	29.8	452.9	611.2	140.6	8.0
31000.0	313.3	-28.4	-38.3	37.4	445.8	609.6	144.1	9.1
31500.0	306.8	-29.7	-37.8	45.0	438.8	607.9	147.6	9.7
32000.0	300.3	-31.0	-37.5	52.6	432.0	610.3	150.7	10.3
32500.0	293.9	-32.2	-39.1	49.9	424.8	604.9	149.9	10.4
33000.0	287.7	-33.3	-40.8	46.6	417.7	602.4	148.0	10.4
33500.0	281.5	-34.4	-42.5	43.3	410.7	602.0	148.8	10.2
34000.0	275.4	-35.5	-43.9	41.6	403.7	600.6	150.8	9.9
34500.0	269.4	-36.7	-45.2	40.1	396.8	599.1	157.0	9.7
35000.0	263.6	-37.8	-46.6	38.6	390.0	597.7	165.6	9.9
35500.0	257.8	-38.9	-48.0	37.1	383.4	596.3	171.9	10.5
36000.0	252.2	-34.0	-42.5	35.6	376.9	594.8	176.3	11.6
36500.0	246.6	-41.2	-51.1	32.9**	370.4	595.3	179.2	12.3
37000.0	241.0	-42.4	-53.2	29.3**	363.9	591.7	160.8	12.2
37500.0	235.6	-43.7	-55.4	25.7**	357.6	590.2	162.6	12.0
38000.0	230.3	-44.9	-57.6	22.1**	351.4	588.6	166.4	10.5
38500.0	225.1	-46.1	-60.1	18.5**	345.3	587.0	191.5	9.0
39000.0	220.0	-47.3	-62.7	14.9**	339.3	585.4	197.5	7.5
39500.0	215.0	-48.5	-65.7	11.3**	333.5	583.9	205.9	6.3
40000.0	210.1	-49.8	-69.4	7.8**	327.7	582.3	226.5	4.5
40500.0	205.4	-51.0	-74.5	4.2**	322.1	580.7	209.0	3.9
41000.0	200.8	-52.2	-87.0	6.4**	316.5	579.1	303.5	5.2
41500.0	196.0	-53.4			310.8	577.5	322.5	6.0
42000.0	191.4	-54.6			305.1	575.9	333.5	6.9
42500.0	186.8	-55.8			299.8	574.3	341.1	9.3
43000.0	182.4	-57.0			294.0	572.7	349.5	8.9
43500.0	178.1	-58.3			288.7	571.1	358.6	8.7

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
 16 JULY 16 0950 HRS MDT
 ASCENSION NO. 162

UPPER AIR DATA
 1970010162
 HOLLOWAY

GEODETIC COORDINATES
 J2.88865 LAT ULG
 106.09965 LON UEG

TABLE 12 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (IN) KNOTS	WIND DATA SPEED KNOTS	INFLUX OF REFRACTION
44000.0	173.8	-59.5		283.4	569.5	110.3	8.2	1.000063
44500.0	169.7	-60.7		276.3	567.9	25.0	8.1	1.000062
45000.0	165.7	-61.9		273.2	566.2	35.0	8.6	1.000061
45500.0	161.7	-63.0		268.1	564.7	41.4	9.4	1.000060
46000.0	157.8	-64.0		262.7	563.4	46.9	10.3	1.000059
46500.0	153.9	-65.0		257.5	562.1	51.6	11.1	1.000057
47000.0	150.1	-66.0		252.4	560.8	52.7	12.0	1.000056
47500.0	146.4	-66.8		247.1	559.7	67.2	12.2	1.000055
48000.0	142.8	-67.5		241.9	558.6	61.8	12.7	1.000054
48500.0	139.2	-68.3		236.8	557.6	95.7	13.2	1.000053
49000.0	135.8	-66.3		226.7	560.3	111.8	13.1	1.000051
49500.0	132.4	-66.2		222.8	560.5	120.7	14.1	1.000050
50000.0	129.1	-66.7		217.8	559.6	136.9	11.3	1.000049
50500.0	125.9	-67.2		212.9	559.1	153.1	8.9	1.000047
51000.0	122.8	-67.7		206.2	558.5	169.8	7.4	1.000046
51500.0	119.7	-68.2		203.5	557.8	184.6	6.4	1.000045
52000.0	116.7	-69.1		199.3	556.6	200.7	5.9	1.000044
52500.0	113.8	-69.9		195.1	555.3	171.9	6.2	1.000043
53000.0	111.0	-70.8		191.0	554.1	150.3	7.8	1.000043
53500.0	108.2	-70.7		186.1	554.4	130.1	9.7	1.000041
54000.0	105.5	-69.7		180.6	555.6	125.7	11.7	1.000040
54500.0	102.8	-68.8		175.3	556.9	118.5	14.0	1.000039
55000.0	100.2	-67.9		170.1	558.2	119.4	14.3	1.000038
55500.0	97.7	-67.0		165.2	559.3	121.0	14.4	1.000037
56000.0	95.3	-66.2		160.4	560.5	122.0	14.3	1.000036
56500.0	93.0	-65.7		156.1	561.1	121.4	13.9	1.000035
57000.0	90.7	-66.1		152.5	560.6	120.7	13.5	1.000034
57500.0	88.4	-66.4		149.0	560.2	116.9	13.5	1.000033
58000.0	86.3	-66.8		145.6	559.6	112.2	13.7	1.000032
58500.0	84.1	-67.3		142.3	559.9	108.0	13.9	1.000032
59000.0	82.0	-67.6		139.0	556.6	105.0	14.0	1.000031
59500.0	80.0	-66.2		134.7	560.5	102.0	14.1	1.000030
60000.0	78.0	-64.8		130.5	562.4	102.1	14.5	1.000029
60500.0	76.1	-64.2		126.9	563.1	103.6	15.1	1.000028
61000.0	74.3	-64.7		124.1	562.5	105.4	15.8	1.000028
61500.0	72.4	-65.2		121.3	561.8	110.7	17.4	1.000027
62000.0	70.7	-65.3		118.4	561.7	115.0	19.2	1.000026
62500.0	68.9	-64.6		115.2	562.6	115.0	20.1	1.000026
63000.0	67.3	-63.9		111.0	563.9	114.0	20.3	1.000025
63500.0	65.6	-62.6		108.0	562.3	112.2	20.5	1.000024

STATION ALTITUDE 4126.59 FFT MSL
16 JULY 81 0950 HRS MDT
ASCENSION NO. 162

UPPER AIR DATA
1970010162
HOLLOMAY

GEODETIC COORDINATES
32.88465 LAT UEG
106.09965 LON UEG

TABLE 12 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT DEGREES	REL.HUM. PERCENT	SHELF METER	DENSITY GM/CUBIC METER	SOUND SPEED KNOTS	WIND DATA DIRECTION DEGREES (IN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	64.1	-61.6	-58.0	105.5	5666.6	109.6	20.5	1.000023		
64500.0	62.5	-60.7	-59.7	102.5	5677.9	106.0	20.4	1.000023		
65000.0	61.0	-59.7	-58.7	99.5	5694.2	103.9	20.7	1.000022		
65500.0	59.5	-58.7	-57.0	96.7	5704.5	103.2	21.2	1.000022		
66000.0	58.1	-58.3	-57.0	94.2	5714.0	102.5	21.6	1.000021		
66500.0	56.7	-58.0	-57.7	91.9	5714.4	100.7	22.1	1.000020		
67000.0	55.4	-57.7	-55.8	89.6	5714.9	98.2	22.4	1.000020		
67500.0	54.1	-57.3	-54.0	87.3	5724.3	96.3	22.7	1.000019		
68000.0	52.8	-57.0	-52.8	85.1	5724.7	94.9	23.9	1.000019		
68500.0	51.6	-56.7	-56.7	83.0	5734.1	93.0	25.2	1.000018		
69000.0	50.3	-56.4	-55.8	80.9	5734.6	91.2	25.7	1.000018		
69500.0	49.0	-55.8	-55.2	78.8	5744.3	88.5	24.8	1.000018		
70000.0	48.0	-55.2	-54.6	76.6	5754.1	81.4	24.0	1.000017		
70500.0	46.9	-54.6	-54.0	74.8	5754.9	80.0	23.8	1.000017		
71000.0	45.6	-54.0	-53.3	72.8	5764.8	81.2	23.8	1.000016		
71500.0	44.7	-53.3	-52.7	70.9	5774.6	82.3	23.8	1.000016		
72000.0	43.7	-52.7	-52.1	69.1	5784.4	80.8	25.6	1.000015		
72500.0	42.7	-52.1	-51.4	67.3	5794.2	91.1	27.9	1.000015		
73000.0	41.7	-51.4	-50.7	65.5	5804.1	94.5	30.3	1.000015		
73500.0	40.7	-51.0	-50.7	63.9	5804.7	92.9	30.1	1.000014		
74000.0	39.8	-50.6	-50.6	62.4	5804.9	91.5	30.0	1.000014		
74500.0	38.9	-50.7	-50.6	60.9	5814.0	90.0	29.8	1.000014		
75000.0	38.0	-50.6	-50.5	59.5	5814.2	89.8	29.4	1.000013		
75500.0	37.1	-50.5	-50.5	58.1	5814.4	89.6	29.0	1.000013		
76000.0	36.3	-50.3	-50.2	56.7	5814.5	89.6	28.8	1.000013		
76500.0	35.4	-50.2	-50.1	55.4	5814.7	89.6	28.8	1.000012		
77000.0	34.6	-50.1	-50.0	54.1	5814.9	89.7	28.9	1.000012		
77500.0	33.6	-50.0	-49.8	52.8	5824.0	89.9	28.7	1.000012		
78000.0	32.3	-49.8	-49.6	51.6	5824.2	90.1	28.6	1.000011		
78500.0	32.3	-49.7	-49.6	50.4	5824.3	90.4	28.4	1.000011		
79000.0	31.6	-49.6	-49.5	49.2	5824.5	92.9	27.9	1.000011		
79500.0	30.8	-49.5	-49.3	48.0	5824.7	95.9	27.4	1.000011		
80000.0	30.1	-49.3	-49.2	46.9	5824.8	98.9	27.0	1.000010		
80500.0	29.5	-49.2	-49.2	45.6	5834.1	100.9	27.6	1.000010		
81000.0	28.8	-49.0	-48.8	44.7	5834.3	102.8	28.3	1.000010		
81500.0	28.1	-48.8	-48.6	43.7	5844.5	103.0	29.1	1.000010		
82000.0	27.5	-48.6	-48.4	42.7	5844.6	102.3	30.3	1.000009		
82500.0	26.9	-48.4	-48.3	41.7	5844.0	100.9	31.5	1.000009		
83000.0	26.3	-48.3	-48.2	40.7	5844.2	99.5	32.8	1.000009		
83500.0	25.7	-48.2	-48.1	39.7	5844.4	98.3	33.8	1.000009		

STATION ALTITUDE 4126.59 FEET MSL
16 JULY 01 0950 HRS MDT
ASCENSION NO. 162

UPPLR AIR DATA
19700101012
MILLIBARS

OUT TIC COORDINATES
32.8886 LAT DEG
106.09965 LON DEG

TABLE 12 Con't

GEOP. TELL	PRESSURE	TEMPERATURE	REL.HUM.	DENSITY	INDEX
ALTITUDE MSL FEET	MMILLIARS	AIR DEPOINT DEGREES	PERCENT	GM/CUBIC METER	REFRACTION
84000.0	25.1	-47.9	30.8	584.7	1.000009
84500.0	24.5	-47.7	37.9	584.9	1.000008
85000.0	24.0	-47.6	37.0	585.1	37.0
85500.0	23.4	-47.4	36.1	585.4	38.2
86000.0	22.9	-47.2	35.3	585.6	39.5
86500.0	22.4	-47.1	34.5	585.8	40.5
87000.0	21.9	-47.0	33.7	585.8	41.3
87500.0	21.4	-47.0	32.9	585.8	42.0
88000.0	20.9	-47.0	32.2	585.9	42.8
88500.0	20.4	-46.9	31.4	585.9	43.2
89000.0	20.0	-46.8	30.7	586.1	43.8
89500.0	19.5	-46.2	30.0	586.9	44.4
90000.0	19.1	-45.5	29.2	587.8	45.1
90500.0	18.7	-44.8	28.5	588.7	45.9
91000.0	18.3	-44.1	27.8	589.6	46.8
91500.0	17.9	-43.4	27.1	590.5	46.5
92000.0	17.5	-42.7	26.4	591.4	45.9
92500.0	17.1	-42.0	25.7	592.2	41.4
93000.0	16.7	-41.4	25.1	593.1	38.9
93500.0	16.3	-40.7	24.5	594.0	38.7
94000.0	16.0	-40.0	23.8	594.9	38.8
94500.0	15.6	-39.3	23.3	595.7	38.9
95000.0	15.3	-38.6	22.7	596.6	38.7
95500.0	14.9	-38.5	22.2	596.7	37.6
96000.0	14.6	-38.6	21.7	596.7	43.3
96500.0	14.3	-38.6	21.2	596.6	43.5
97000.0	14.0	-38.6	20.8	596.6	41.00005
97500.0	13.7	-38.7	20.3	596.5	41.00005
98000.0	13.4	-38.7	19.9	596.5	41.00004
98500.0	13.1	-38.8	19.4	596.4	41.00004
99000.0	12.8	-38.8	19.0		1.000004

STATION ALTITUDE 4126.59 FEET MSL
16 JULY 81
ASCENSION NO. 102
0950 HRS MDT

MANDATORY LEVELS
1970010162
HOLLOWAY

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 13

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE DEGREES	AIR DEPOINT CENTIGRADE	REL.HUM. PERCENT	WIND DATA	
					DEGREES	DIRECTION DEGREES (TN) KNOTS
450.0	4996.	23.3	12.0	51.	176.4	6.6
400.0	6725.	20.2	10.4	53.	185.1	10.8
750.0	8542.	16.3	7.9	57.	165.4	6.5
700.0	10459.	12.6	4.8	59.	201.6	4.4
650.0	12486.	8.1	•7	60.	221.8	9.1
600.0	14637.	2.9	-2.2	69.	216.5	11.8
550.0	16936.	-1.2	-5.6	72.	223.8	5.0
500.0	19409.	-6.4	-9.9	76.	193.5	6.7
450.0	22088.	-10.3	-15.0	69.	209.6	8.4
400.0	25041.	-15.1	-24.1	40.	210.0	8.2
350.0	28308.	-22.4	-34.0	34.	153.8	5.9
300.0	31962.	-31.1	-37.5	53.	150.8	10.3
250.0	36121.	-40.5	-49.9	35.	177.7	12.0
200.0	40983.	-52.4			306.5	5.3
175.0	43772.	-59.1			7.7	8.3
150.0	46889.	-66.0			55.6	12.0
125.0	50502.	-67.3			158.5	8.4
100.0	54875.	-67.8			119.4	14.3
80.0	59303.	-66.2			102.2	14.1
70.0	61976.	-65.2			116.2	19.7
60.0	65102.	-59.0			103.4	21.0
50.0	68880.	-56.3			90.2	25.4
40.0	73593.	-50.9			91.8	30.1
30.0	79760.	-49.3			99.2	27.1
25.0	83695.	-47.9			97.0	34.9
20.0	88539.	-46.9			92.0	43.7
15.0	94916.	-38.5			87.4	41.1

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

END

DATE
FILMED

9-81

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